

AMERICAN FARMER.

RURAL ECONOMY, INTERNAL IMPROVEMENTS, PRICES CURRENT.

"O fortunatos nimium sua si bona norint
Agricolae." . . . VIRG.

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AGRICULTURE.

FROM THE MASSACHUSETTS AGRICULTURAL JOURNAL.

Remarks on Soiling.

[Communicated by the Hon. Josiah Quincy.]

The practice of "soiling cattle," as it is called, or keeping them, all the year round, in their stables, with only a daily and short liberty of a yard, having been a frequent subject of the attention, and an object of a proffered premium, by the Board of Trustees of the Massachusetts Society for promoting Agriculture, I shall, in conformity with their request, communicate my own practice and experience, on that mode of managing stock.

Previously, however, to stating any observations, upon the results of my own experience, I think it may be useful to abstract and digest into a regular form, some of the principal facts and reasonings of transatlantic farmers. These may tend to attract the attention of our practical husbandmen more forcibly to the subject, and enable those, whose farms and capital are in a condition that authorizes the adopting of this mode, to do it with more facility and success.

There are six distinct advantages, which those, who advocate soiling, propose to themselves by the practice, and on which they establish the preference of this mode to the common one of pasturing cattle during the summer.

- 1st. The saving of land.
- 2d. The saving of fencing.
- 3d. The economizing of food.
- 4th. The better condition and greater comfort of the cattle.
- 5th. The greater product of milk.
- 6th. The attainment of manure.

The only offset to all these advantages is the labour of raising and cutting the food, and feeding and taking care of the stock.

1st. *The saving of land.* In relation to this fact, there can be no question. All European writers assert it. They differ only as to the degree of saving which results. Some assert that it is as one to three. Others, as one to seven. Others assert the saving to be yet greater. That is, one acre kept for soiling will go as far as three or seven kept for pasture, in the support of stock. It is not important to analyze this point farther. For every practical purpose, the evidence is sufficient, to satisfy every mind, that a very great saving of land results from this practice, and that on farms, where the whole soil is capable of being ploughed, the economy of soiling is great; and on all such farms may profitably be adopted, provided that the expenses, incident to the mode, do not counterbalance these advantages.

It may be, however, useful to observe that the reason of the diversity of statement, in relation to the degree of saving, among European writers, results from the different ways, in which the land, used for soiling, is cultivated for the purpose of raising food. Some satisfy themselves with enriching the former pasture and cutting the grass it produces, for the soiling use. Others plough up the pasture, raise cabbages or other succulent food, on which they support their stock. Now it is plain the result of a comparison of saving of land made between an acre of enriched pasture, and an acre, appropriated to the latter of these modes of husbandry, must be very different.

In either case, the economy is sufficiently great, and, if nothing else be an offset for the advantage, this must be decisive.

2d. *Saving of fencing.* Here also is a great and decided economy. It includes not only the saving of the material used for fencing; the labour of making the

fence; and of keeping it in repair; but also of the land occupied by the fences; and of all the headlands, which are necessarily left on each side the fence; and which are usually an apology for slovenliness and a refuge for vermin. I have seen no precise estimate of this economy. Nor does it seem to be practicable, to be made, upon any principle, applicable to farms in general. It will be obviously greater, or less, according to the previous condition of the fences, and the ordinary necessity of erecting such as are usually deemed requisite on each particular farm. Here also the greatness of the economy is, every where, so obvious as to render any particular calculations unimportant. The general effect of soiling cattle is, to render all interior fences absolutely useless; excepting those which surround the buildings, and lead from these to the highway. A farm thus relieved from interior fences, not only enjoys all the exemptions from great actual and great annual expenditures, but also there are other facilities, in its management, resulting from this absence of interior fences, which are obvious and considerable. There is no waste land. The whole may be divided into cultivation, with precise reference to the state of soil. When the plough runs, the length of the furrow is determined only by the judgment of the proprietor. It presents to the eye a scene of cultivation; neat, orderly and beautiful.

3d. *The economy of food.* There are six ways by which beasts destroy the article destined for their food. 1. By eating. 2. By walking. 3. By dunging. 4. By staling. 5. By lying down. 6. By breathing on it. Of these six, the first only is useful. All the others are wasteful.

By pasturing, the five last modes are exercised without any check, or compensation. By keeping in the house, they may be all prevented totally by great care; and almost totally, by very general and common attention.

It is on the saving, resulting from this prevention of waste, that much of the economy of this mode of keeping beasts depends. In pastures, whatever is trod upon, or is affected by their dung, or their urine, is laid upon, or even long breathed upon, is lost. And this waste is always in proportion to the richness and the productive power of the pasture; for just in that proportion is the quantity of food injured by all the five modes of destruction above stated. Whereas the same being cut and delivered to them sparingly, in point of time, but sufficiently in point of quantity, will every particle of it be consumed. Besides, it is found by experience, that, in this mode of feeding, beasts will eat many products of the earth in the stall, which they will absolutely reject in the pasture.

4th. *The better condition and greater comfort of the cattle.*

The condition of cattle will always depend chiefly upon the quantity and the quality of the food, and regularity of their supply. In all these respects, feeding in the stall has the advantage of pasturing, because in stall feeding, all are under the guidance of intelligence and discretion, and nothing is left to accident; whereas, in pasturing, the beasts are left to their own care. When the pastures are good, and there is a great surplus of food upon them, the difference is not, in this respect, great; but as soon as the pastures become "pinched" as it is called, by drought, the difference is always perceptible. Farmers, who pasture their cattle, seldom, if ever, provide a supply of succulent food, to be in readiness in case of any accidental deficiency of pasture. The consequence is that, on the pasturing system, the summer condition of cattle always depends wholly on the state of the pastures. Now as every farmer, where he is able, does, and ought to stock his pastures up to their full pasture power, it follows, that even a small drought will affect the condition of the animal something;

and a severe one very sensibly; a fact, of which every man may convince himself by observing cattle, at pasture, in dry seasons. Now one great benefit, resulting from stall feeding, is that it makes the condition of cattle, in as great a degree as possible independent of variations of the season; and although an absolute independence is impossible, yet it is always much greater in stall feeding than it can be in any mode of pasturing.

The want of sufficient exercise, which is inseparable from this mode of feeding in stalls, is a popular, and when not tested by fact, is deemed an unanswerable objection. Yet all those who have made the experiment, and whose opinions I have seen expressed upon the subject, are unanimous in declaring that no ill effect results from this circumstance. One writer asserts that he has kept a large herd for several years, in this way, and during the whole time "he never had an animal essentially sick, had never one die, and had never one miscarry."

It is to be observed that stall feeding of cattle, does not imply keeping cattle in stalls, or in the house the whole time. It only intends, always feeding them there, and keeping them there the chief of the time. On the contrary, it is an essential part of the system, to let them loose in yards, well shaded either artificially, or by trees, at least two hours in the forenoon, and as many in the afternoon. Here they lay themselves at their ease, in the best ruminating attitudes, or move round taking some exercise in that act, or in rubbing themselves against posts provided for the purpose. If any person will observe the slowness, with which cattle usually walk in their pastures, that while in feeding they do little more than stand; and when full, that they almost invariably lie down, he will hardly believe that the difference between the exercise thus attained, and that which they get by having four hours in the day exclusively devoted to that object, can scarcely materially affect their health. When to this is added the consideration, that when fed in the stall, they are wholly protected from eating any noxious vegetables; from drinking bad water; from all injury from being worried by dogs, or one another; that they are kept through the heat of the day in the cool shades; under cover; protected from flies; it cannot be a question but that this mode is far more conducive to the health of the animal than pasturing possibly can be. Experience is also decisive upon the subject. If the condition of the animal be, as is here shown, better, it follows that this state must be more comfortable; for the one is dependant on the other.

5th. *Greater product of milk.* Although it is generally stated that this is the case, yet I do not recollect having met with any precise comparison upon the subject. The general apprehension among farmers, seems to be, that although the condition of the animal may be better, yet that the tendency of the food to milk is not so great as when they are permitted to range in pastures. The truth, however, upon this point can easily be explained, and in a manner perfectly conformable to my own experience. During the flush of feed, that is, for perhaps the first month after cattle are turned to pasture, there is little difference, so far as respects the milk product, between pasturing and stall feeding. At that time there is generally a great supply of food; the cattle are eager after it. They have great opportunity to select.—They feed quietly, and take only the most nutritious and palatable. After this month, if the stall feeder will, this equality will gradually cease; and in his favour. The pasture food almost always grows more or less scarce, according to the particular character of the season. Whereas by taking care to provide a regular succession of succulent crops, he who feeds his beasts in stalls may keep the milk product unaffected

by the state of the season, to the end of the autumn.

6th. *The attainment of manure.* This is a great and characteristic benefit, resulting from soiling; or stall feeding of cattle through the year. In pasturing, the summer manure is almost wholly lost. It falls upon rocks, among bushes, in watercourses, on the sides of hills. It is evaporated by the sun. It is washed away by the rain. Insects destroy a part.—The residuum, a dry hard cake, lies sometimes a year upon the ground; often impeding vegetation, and never enriching the earth, in any thing like the proportion it would do, if it had been disposed under cover and kept free from the action of the sun, in appropriate and covered receptacles, to be carted out annually in the proper season, and ploughed at once under the surface.

The gain by this saving of the summer manure of beasts, although stated by European writers, yet it is generally loosely done, and often in measures of quantity, or capacity, not easily reducible to those, which prevail in our country. It is however, unequivocally very great and important, and well worthy of the solicitude of every farmer. As the great object of every farmer ought to be, to increase his quantity of manures, there can be no mode preferable to the one here suggested. For suitable receptacles, or recipients being provided, every thing of the nature of excrementitious matter is preserved and deposited in the soil, at the leisure and at the discretion of the farmer.

It was the conviction, resulting from the preceding facts and statements, which lead me to adopt, two or three years since, the idea of putting my farm into this mode of management. The particular situation of it, seemed to point it out as precisely suited to such a mode of conduct. It is a level plain, constituted of alluvion upon clay, occasionally intermixed with lighter quality of soil. It has no fences but post and rails, so that by adopting this mode, it might be wholly relieved from interior fences, the expense of which had always been a heavy item in my farm accounts. For the three years past, I have been, in this practice. During the two former years with some occasional deviations. During the last, regularly, and systematically, without any deviation. The result has been all that I anticipated, in every respect. Indeed it has been so satisfactory that I think no considerations would induce me to adopt a different mode in the management of my stock.

The result of my experience has been perfectly conformable to the statements made by European writers.

My stock has been uniformly healthy; in a condition generally superior to my neighbours'; all of whom pastured their cattle. In point of milk, during the flush of feed in June, the product was not inferior to any, according to the number of my cows, with which I had an opportunity to compare. In July and August, in my vicinity the drought was severe, and the milk cows in my neighbourhood fell off in their milk, nearly, and some, quite, a half. Mine were kept during the whole season, without any sensible diminution, which could be attributed to the want of food or its quality. The cows thrived and showed no marks of discontent. None were materially sick. I lost none.

With respect to stock, the practice upon my farm had been from almost time immemorial to keep from ten to fifteen head of cattle. For the support of these, about fifty acres of land were appropriated during the summer months. Besides which they were permitted to range in the autumn over the mowing. The result was that in good seasons, the stock thrived and were kept well. When the seasons were dry, they fared badly. When the drought was severe, they were shut up and fed upon corn stalks or hay.—This was the usual course. And the practice and the result is at this day very similar, in all my vicinity.

My practice, and the result of the past year were the following:

My stock, consisting at an average of twenty cows, were kept in their stalls through the whole year.—The practice was to feed them about six times in the day, and to permit them to range in a yard about eighty feet square, two hours in the forenoon and two in the afternoon. They were kept well littered and well curried; while they were out of the stable, the attendant took that opportunity to clean the stalls, and to supply fresh litter. During winter, they were fed, as is usual, with salt and fresh hay and vegetables. From June to No-

vember, inclusive, may be considered, strictly speaking, the soiling season; by which is understood, that in which they are fed with green food in the house. As this is the critical period, I shall be minute in the account of my preparations and proceedings.

In the autumn preceding I had caused rye to be sown upon an inverted sward, very thick, on about three acres. Early in April I prepared and sowed, in manner as shall be stated afterwards, about three acres and one quarter of land with Indian corn in drills. I also sowed about three acres of oats and buckwheat, broadcast, at the rate of three bushels to the acre, about the latter end of the month. The whole quantity of land I thus prepared to be used in soiling, in aid of my grass, did but little exceed nine acres. Of these, that which I sowed with rye, turned out so poorly, that I never soiled from it more than five days, so that in fact the land thus prepared did, in efficiency, but little exceed six acres.

(To be continued.)

FOR THE AMERICAN FARMER.

THE AGRICULTURE OF THE UNITED STATES.

No. II.

In the opening number on this subject, it was intended to commence such an exposition of American agriculture, as would prove our real acquaintance with the subject, our considerable acquisitions of that knowledge from sources abroad other than English, and the impossibility, that our knowledge of agriculture in our most considerable and most productive branches, could have been obtained from the incongenial climate and destitution of the culture of those principal productions in Great Britain and Ireland. The articles of *rice*, *indigo*, and *tobacco*, have been first specified. Before we proceed with our subject, we cheerfully admit the respectable progress of the small grain, cattle, and green crop farming and of gardening and the northern fruits in the United Kingdom, the use of their publications on those branches, and their progress and improvement in most things, which pertain to the culture of the limited productions, of which their two Islands are capable. It is in a spirit of amity and candour, that these remarks are made, and not of invidiousness. The subject is too interesting for the admission into its demonstrations of any little extraneous passions. A profound and faithful inquiry into the causes, which have made us a great improving, and agricultural people in two centuries, will have to us all those beneficial consequences of *self examination*. and will be as useful to Great Britain and Ireland, and the rest of Europe, as our lessons and examples in the abolition of the slave trade, in the creation and establishment of religious liberty, in the deposit of legislative power, in just and wise proportion in the hands of those who inhabit all our counties, and in those great moral civil institutions of the union and the states, which subjecting the ecclesiastical and military, to the civil power, secure the devotion of our own nation to their own country, and receive the approbation of illustrious men in the most eminent stations in the old world, and in the remotest parts of the old and the new world.

But we return to our subject and proceed with the production of cotton in the text book of Mr. Drayton.

It appears, that the culture of cotton was so far known in South Carolina 1754, that a very small quantity was then exported. We have seen authentic evidence, that it was raised in 1736 in Talbot, of Maryland. But though it had been grown from those times in patches in those and the intermediate and neighbouring provinces or states, it received no particular attention. The necessities of the revolutionary war occasioned it to be raised for home use, so generally in the cotton region, as to cause production in the counties of Cape May and Sussex, on both sides of the bay of Delaware. But the excitement of our country to those new cultures and forms of general and diversified industry, which were ren-

dered necessary by the consequences of the revolution, occasioned the cotton to be taken up, and pursued with a new and intelligent spirit, and with such wonderful success, that 140,000,000 of pounds weight were raised for exportation and consumption, worth, at the value in our various seaports, the vast sum of 42 millions of dollars. In leading to this culture the truly respectable powerful Sinclairs, and Youngs, Somervilles and Davys, the Roziars and Chaptals of Europe, had no participation. It may be justly affirmed of the American cultivators, that while they paid considerable attention to the rules and practices of the countries of Europe, they have not suffered a blind veneration for them to overrule the suggestions of nature here, nor their own inquiries, reflections and opinions. To this intelligence, and to their own energy, they owe the creation of their marvellous cotton crops, which so completely engaged the southern industry before the establishment of the sugar culture, that not only rice, tobacco, and indigo, were reduced in quantity, but the grass and grain farmers of the other states were invited to supply them with meat, horses, mules, and bread stuffs. We refer our readers at home and abroad for a neat view of the culture of the various kinds of cotton, to our author, Mr. Drayton, in his ten pages 126 to 136. On this subject, we are compelled to add, that the proudest foreign claimant of an efficient instrument, *in aid of agriculture and the preparation of the cultivator's crop*, must yield the palm of success to Mr. Eli Whitney, the inventor of our *saw cotton ginning water-mill*.—This simple machine frees cotton from the seed so as to save, by one man, the labour of 1000 in familiar practice. Before this invention, we could only raise as much cotton as we could pick from the seeds or clean by rollers. Now our agriculture, *thus before enchained*, is free and able to supply any demand and produce any wanted crop.

The Indian corn, or maize or *zea* has a proper and regular district, more extensive northward than that of the cotton; though it is raised with considerable profit and convenience in our five most northern degrees of latitude, it spreads south and west over our ten lowest degrees of latitude, as a natural, certain and valuable crop. In the production of this noble grain, found among the red natives of America, the farmers of Great Britain and Ireland had *no practice, no knowledge* to teach us. We make of it various kinds of bread, of cake, and of other alimentary preparations *the pone; hominy; the hoe-cake; the mush or sepaun; the Indian meal fudding; the boiled and roasting ear; the kiln dried and bolted Indian meal for exportation*, unheard of among English cultivators, millers, bakers, and house-wives. It was a favourite grain, at the table of our illustrious farmer Washington down to the epocha, when his glorious sun shed its parting rays upon the broad field of our national agriculture. We have opened with this grain new tracks of commerce and practices in the arts unknown in its region on the continent of Europe. Freer than any other species of corn from mucilage, we employ it, in large proportions *without malting*, in our *breweries of ale*, and use it, in the same state, in the distillery of spirituous liquors. The origination, culture, varieties and soils of this production are perspicuously given in the view of South Carolina, in 136, 137, and 138 pages of our author's work, and in some other occasional passages, with other American works. It is a very general crop; much more so than wheat in the Island of Great Britain, or in the southern moiety of Ireland. The culture of rice, indigo, tobacco, cotton, and sugar, the feeding of our best pork, and fattest and other beef cattle occasions far the greatest part of our Indian corn to be consumed at home. From its highly saccharine character, the leaves, stalks, husks and even lately the cobs or spikes on which the large grains closely grow, ground to a chaff are a favourite food for all kinds of cattle, and have materially influenced, in the true Indian corn district, the clearing and cultivation of common grass lands.

A Swiss colony introduced the culture of silk nearly seventy years ago in South Carolina or Purrysburg on the Savannah river, 10,000 pounds were brought to market in a year. The mulberry succeeds in various states. A Dutch settlement, 33 years ago, produced excellent silk on the Ashley river, which flows along one flank of the city of Charleston. But rice, cotton, tobacco, indigo and sugar, have postponed the culture of silk at least for the present, but not without the conviction, that an ample knowledge of it is secured without the benefit of instruction of the ablest Britons from Caithness to Cornwall: from Cork to Londonderry.

A very important catalogue of new productions of the U. States entirely unknown to the British cultivators, is now on our agricultural table, some are greatly advanced. The respectable Frenchman Mr. Bosie, who introduced the effectual culture of the sugar cane, and the emigrants from the *Canaries*, who before introduced it on a small scale, are all dead but the crops, which had grown to ten millions of pounds in 1810, besides the treacle or molasses, amounted, in cane sugar, in 1819 to 36,000,000 of pounds weight. Mr. Drayton's vigilance and accuracy has not been exercised on this production, because it was unknown and unexpected at the date of his publication in 1802. For the same reason, he only gives the strong natural indications of our extensive capacity for the *wine grape*, which in Kentucky, Indiana, North Carolina, South Carolina, Alabama, and other states, has taken the firmest hold of the minds of our cultivators, economists, statesmen and of the learned friends of our agriculture. On this article of culture, we are obliged to remember that Great Britain has been able to give us no lesson, of her experience, except that on such authority as the venerable *Arthur Young*, she cannot produce the wine-grape. We learn otherwise, from the amiable and judicious *Rozier* and his excellent and powerful successor *Chapual* and others, and from our own researches, that our favourite *Madeira* wine, made in that island from the grape of the Greek or Turkish Cypress, and vines of various acceptable qualities, can be confidently expected, in the corresponding temperatures of our own country from foreign and native vines. America is stimulated by the reflection, that France makes a wine crop annually worth 100 millions of dollars. We extend our attention, our exertions and our hopes to the olive, sesamum, and poppy-seed oils, unknown to English, Irish, Welch and Scotch cultivators; to these we add, on sufficient experiments, the oil of the Palma Christi, which is familiarly and successfully made here. We bend a like attention to the gum opium, the fig, the date and the prune, never naturalised by Britons for their profit or our instruction.

We leave, with our respectful compliments, the neat, concise and valuable work of Mr. Drayton, but cannot suppress an ardent wish, that a revised edition with the favourable results of time, in this our country, and of his observations and continued experience could be obtained by his grateful fellow citizens.

We now enter upon the field of more direct relation between the agriculture of the United Kingdom of Great Britain and our country. In regard to our energy, industry and progress, it is a stupendous fact, that since the year 1620, when our first permanent settlements were made, we have disencumbered of forest and prepared for the plough 120,000,000 of acres of land, a quantity of soil greater by one hundred per cent. than all the cleared lands uncovered by water in England, Ireland, Wales and Scotland—cleared by their nation, now 15 to 17 millions of people, from their first existence.

This body of cleared lands of the United States embracing the region of the cotton, the cane, the grape vine, the olive, the maize, the many bread grains, the fig, the prune, the orange, and the many grasses, is certainly in a more teeming portion of the temperate zone of the earth, than the soils and climes from Cornwall and Munster to Caithness and Derry, of British Europe. Where do we find with the intelligent industry of north Britain, the stunted breeds of

Galway horses, of Shetland sheep, and of beef and milch cattle on the Scottish Hills. Examine the accounts of our cattle shows in the northern and eastern states, in New York, Philadelphia and Baltimore, in the columns of the American Farmer. Compare the sheep of Pennsylvania raised by the Germans, the Irish the Welsh descendants, with the condition of the Scottish, Welsh Irish and even the Norfolk sheep, when changed by Mr. Coke, of Holkham, after our revolutionary peace, and the destitution of sheep in British Cheshire. Compare the destitution of the British county of Norfolk of *wheat* in 1775, with the noble white wheat crops of the great counties on the rivers of the Chesapeake Bay. Compare the early leading Philadelphia standard of superfine flour botomed on the supplies of those beautiful wheats with the first flour of England, in the markets of Cadiz, Barbadoes, Antigua and Jamaica, and determine the perfection of the seed, the kinds, the culture, the cleaning and the manufacturing. This standard is now extended in America to the first brands of Baltimore, Alexandria, Richmond, Norfolk, Wilmington, N. C. and Charleston; while English flour remains stationary. They cannot have taught us in wheat what they do not themselves perform, in kind quality or condition. We did not obtain our new seeds of wheat to improve our crops from the wet, unfilled and kiln dried samples of the cold northern and moist temperature of Great Britain. The wheats of the Ukraine, the Garonne, of Spain, of Sicily, of Italy of northern Africa, were sought or found by our enterprising voyagers, and tried for the selection of the best and fittest in our soils and climates. We know that from the universal capacity to read among our white population, the valuable publications of great Britain on grain, and cattle, farming, horticulture, and the fruits of the north, and of farmers vegetables, have been freely used here and have been highly serviceable. But the soils, climes and people, that gave them the German Mangel Wurtzel, the Swedish Ruta Baga, the Flemish red clover the wheats of the Polish and Italian granaries, the merino sheep, the Spanish barb and the true Barbary horse the peach, the apple, the plum, the cherry, have been open to us through books, emigrants and travellers, and not neglected. The grapes, the grains, the grasses, the choicest table fruits and breeding animals of southern Europe, and of the coasts and islands of the productive Mediterranean, cultivated when Britons were imperfectly clothed in habiliments, manufactured by Providence, have been transferred in every form, and for a long series of years to our numerous seaports.—The agricultural writers of Great Britain, have been circulated in our country and read by part of our planters, and a very small part of the farmers and the inhabitants of our towns, but the ancient Roman writers, Linnæus, Du Hamel, Turbilly, Switzer, works and essays on agriculture, from the other three quarters of the Globe, the Rural Socrates of Switzerland, our own examinations of our capacities, climates, soils and culture of this and other countries, were among the regular means by which in two hundred years, we have made out of the howling wilderness a cultivated country maintaining us in plenty, and yielding a larger value of surplus landed productions in proportion to our numbers than any other country in the world. We intended to pursue this subject further, but we fear to give it an adversary complexion, when we mean only a reasonable defence against allegations injuriously circulated and grounded on information, at once defective and erroneous. We finally remark, that the United States have climes, courses of crops and productions more diversified and of more neat value for their numbers, and yielding a greater exported surplus than any of the several old countries of Europe from which their white population has been drawn, and that therefore we may console ourselves with the reflection, that the continent of Europe views us and our various operations with great and increasing confidence, and that we may safely appeal to the blood relations, in the United Kingdom of that part of our population who migrated from thence, whether those who re-

main and live beyond the Atlantic, or those who live on our side of that ocean are most happy, and virtuous, and most comfortable in their actual situations and reasonable prospects?

CINCINNATUS.

Farmers look at this !!!

The following is an authentic account of a recent sale of cattle in England. It will serve to shew the importance attached to *breed*, and the high estimation in which the best is held in that country.—We record it as an article of interest and curiosity in its way.

Edit. Am. Far.

ANNUAL SALE.

A catalogue of the improved short-horned Cows and Heifers belonging to Mr. Champion, of Blythe, (near Bawtry) Nottinghamshire, which will be sold by Auction, (without reserve) by Mr. J. Boulton, on Friday the 28th of January, 1820.—On the same day several Bulls and Bull-Calves will be shewn to be let or sold, by private contract.

LOT

- 1.—*Georgiana*, six years old, by Mr. Charles Colling's George, a son of Comet, dam by a son of Mr. Charge's old roaned Bull, a son of Mr. Colling's Favourite.—Bulled 15th September, by Warrior * This cow gained the Sweepstakes of 25gs. for the best cow, at Doncaster, in July, 1818.—70 guineas.
- 2.—*Rosabell*, five years old, by a son of Mr. Charles Colling's Windsor, dam by his Comet.—Bulled 10th July, by Blyth Comet.—26 guineas.
- 3.—*Princess*, nine years old, by Neswick.†—This cow is own sister to Prince and Mr. Marfleet's young Neswick; she is also the dam of Pilot, the Gamston Bull, and Pompey.—Bulled 13th October, by Warrior, lame.—26 guineas.
- 4.—*Beauty*, fifteen years old. This cow is the dam of Prince, Young Neswick, Lot 3. and Mr. Oglesby's Bull.—Bulled 15th November, by Warrior, infirm.—26 guineas.
- 5.—*Cathalene*, seventeen years old, (sold at Mr. Charles Colling's sale, 1810, for 150gs.) she is by Washington, her dam the sister to Mr. Charles Colling's Phœnix, which cow was the dam of Favourite and Comet. Bullied 20th July, by Warrior—17 guineas.
- 6.—*May-Day*, four years old by Blyth Comet, her dam a good short-horned cow.—Bulled 19th July, by Blyth, Comet and Warrior.—30 guineas.

* *Warrior*, by Mr. Robert Colling's Wellington, (the son of Comet, dam, Wildair) dam Young Diana, by George; (the son of Favourite, dam Lady Grace) grandam, Diana, by Favourite; the great grandam, Wildair, by Favourite; great great grandam by Ben; great great great grandam by Hubback; great great great great grandam by the sire of Hubback.

† *Neswick*, by own brother to Patriot dam by a bull bought of Mr. Charles Colling. grandam by a twin brother to Ben, (bred by Mr. Robert Colling;) great grandam by Mr. George Coats's bull, (from Old Milbank) the sire of the Driffild Cow.

- 7.—*Bonny Lass*, six years old, by Mr. R. Colling's North Star, dam by own brother to his Moss Rose; grandam by his noted bull Ben.---Bulled 17th August, by Warrior.---41 guineas.
- 8.—*Gaudy*, four years old, by Blyth Comet, her dam by Mr. Coat's Patriot; grandam by the sire of Patriot; great grandam by the sire of the Driffield cow.---Bulled 20th July, by Warrior.---60 guineas.
- 9.—*Brilliant*, three years old, by Warrior, her dam descended from Mr. Mason's breed of Chilton.---Bulled 28th December, by Magnet, the son of Warrior, from Magdalen, Blyth Comet, dam.---48 guineas.
- 10.—*Aurora*, two years old, by Mr. Mason's bull Charles,† with a Heifer Calf, by Warrior; her dam by Blyth Comet; grandam by Neswick.---This heifer is own sister to Young Phœbe, Lot 7, in 1819.---50 guineas.
- 11.—*Young Profit*, two years old, by the Marquis of Exeter's bull Meteor, a son of Blyth Comet, her dam, Profit, (Lot 21, in 1818) by Neswick.---Bulled September 13th, by Blyth Comet.---20 guineas.
- 12.—*Flora*, two years old, by Warrior.---Bulled 26th October, by Magnet.---13 guineas.
- 13.—*Charmer*, one year old, by a grandson of Comet, dam by Palmflower, grandam by Palmflower.---Bulled 9th October, by Warrior.---23 guineas.
- 14.—*Daphne*, two years old, by a son of Mr. Colling's Barmpton, dam Duchess, bred by Mr. Brown, of Aldbrough, by his celebrated Paddock bull.---Bulled 1st July, by Blyth Comet.---26 guineas.
- 15.—*Julia*, two years old, by Meteor, a son of Blyth Comet, her dam, Jubilee, (Lot 19, in 1818) by Prince; grandam by a son of Patriot.---Bulled 12th October, by Warrior.---33 guineas.
- 16.—*Honey*, two years old, by Charles, dam, Honesty, by Blyth Comet; grandam, a remarkably fine short-horned cow.---Bulled 16th August, by Magnet.---58 guineas.
- 17.—*Snowdrop*, one year old, by Warrior, dam by Charles; grandam by Prince.---Bulled 11th October, by Blyth Comet and Magnet.---48 guineas.
- 18.—*Elegant*, one year old by Blyth Comet, dam Stately, (Lot 22, in 1819) by Charles; grandam by Prince.---Bulled 23d December, by Magnet.---65 guineas.
- 19.—*Allspice*, two years old, by Charles, dam, Cinnamon, by Prince; this cow is the dam of Hero, sold the last sale, and also of Rival; grandam, Chesnut, (Lot 1, in 1819) by Blyth Comet; great grandam, Cherry.---Bulled 12th December, by Warrior.---33 guineas.
- 20.—*Matchless*, one year old, by Warrior, dam Myrtle, by Mr. Charles Colling's Windsor; grandam by Windsor.---Bulled 28th November, by Magnet.---65 guineas.

† Charles, by Pope, dam by Chilton; grandam (Marica, for which Mr. Mason refused 700 guineas) by Simon; or, the White Bull; great grandam, Gaudy, by Favourite; great great grandam by Lord Bolingbroke; great great great grandam by Foljambe; great great great great grandam by Hubback.

BULLS,

To be Let or Sold, by private Contract,
Horatio, by Warrior, dam Honesty, by Blyth Comet.---Calved 27th July, 1819.
Plastic, by Warrior, dam, Young Primrose, by Charles; grandam by Blyth Comet; great grandam by Prince; great great grandam by Patriot.---Calved 5th June, 1819.
Lorenzo, by Blyth Comet, dam, Lavinia, by Charles; grandam, Latona, by Old Comet, great grandam, Lilly, by Mr. Colling's son of Favourite; great great grandam by the same.---Calved 1st June, 1819.
Rival, by Warrior, dam, Cinnamon, by Prince; grandam, Chesnut, by Blyth Comet; great grandam, Cherry; great great grandam, Old Chance.---Calved 16th March, 1819.
Points, by Blyth Comet, dam, Tulip, by Charles; grandam by Prince; great grandam by Neswick.---Calved 10th February, 1819.
Rocket, by Blyth Comet, dam, Spangle, by Prince. This cow is also the dam of Robin, Planet, and Sulton.---Calved 1st of February, 1819.
Pompey, five years old, by Blyth Comet, dam (Lot 3) by Neswick; grandam Old Beauty, (Lot 4.)
Chrispin, six years old, by Prince, dam Magdalen, (Blyth Comet and Magnet's dam) by Old Comet; grandam by Washington.
 An ox by Blyth Comet, 2 years and 11 months old, weighed (the four quarters) 1424 pounds—fed on turnips and straw. His portrait is at the Society room. This breed, fattens easily, and at an early age. J. M.
 June 21st, 1820.
 N. B. Blyth Comet is the sire and grand-sire of the young Steer, shewn at Sadler's Yard, December, 1817.

On the Hessian-Fly,

AND ON THE PROPER DEPTH OF SOWING

WHEAT—No. X.

FROM THE NATIONAL RECORDER.

SHARON, *Buck's County, Pennsylvania,* }
 February 1st, 1820.

DEAR SIR---Among the valuable memoirs of your society, there are several communications relative to the Hessian fly; but none of them sufficiently traces its history, or offers any plan that can be relied on to prevent its ravages. Indeed, it is lamentable, that an insect of this grade could have been suffered so long to have committed such devastation as has been ascribed to it. I, however, trust that its career will soon be closed, having during the last fall had an opportunity of investigating the subject, much to my own satisfaction; and as the society appear to feel a deep interest in it, I will now give you my ideas upon it.

On the 9th October last, my very intelligent and worthy neighbour, Mr. John Linton informed me, that, on the preceding day, he saw the fly in the act of depositing its eggs upon the leaf of the young wheat in the stubble field. Taking this valuable and well timed hint, on the 11th I went into the stubble field, to witness the interesting spectacle stated by Mr. Linton. I was,

however, totally disappointed; not a fly was to be seen; but, on examining the plants with a glass, I found the work was completed; an astonishing number of eggs were deposited, scarcely a plant had escaped, and some had more than twenty eggs each. Next day I met with one of the young caterpillars, that had just bursted its shell, and was moving down the leaf: the day after I discovered a plant where the caterpillars had all left the leaf (which I could readily determine by the mark or crust of the egg) and by carefully stripping down the leaf, I saw them on the stalk, about a dozen in number, and some of them within an inch of the root. On the 18th of the same month, the caterpillars had generally passed from the leaf, and many of them had reached the end of their journey. About the middle of November, in a warm exposure, some of them had changed to the flaxseed or chrysalis state; and at this time the most of them are in that state. During my researches, I found them much the most numerous in stubble fields that had been pastured, and that grain sown after September had sustained no damage.

The history of the insect and its larvæ, as far as I have ascertained by actual observation, is as follows:---The fly certainly deposits its eggs in the gutters or furrows of the leaf, on the upper side, from half an inch to an inch or more from the stalk, choosing a position sufficiently exposed to the sun, and affording a sure passage to the stalk, preferring plants having only two leaves fully out; in a few days, probably not exceeding ten, if the weather should be favourable, the eggs (which are oblong, of a brown or somewhat yellow colour) become hatched, and the young caterpillar, of a redish colour, moves down the leaf to its junction with the stalk, then passes between the footstalk of the leaf and body of the plant to near the root, where it is usually seen; it soon afterwards assumes a transparent white appearance, being probably bleached by its covering (I infer this, because I met with two cases where there was an aperture at its lodgment—it was nearly black); it there feeds on the sap of the plant, until it attains its full growth, and passes into the chrysalis state; it seems only calculated to perform a passage from the leaf to near the root; an outer coat or tegument is there formed, which renders it incapable of further motion; it then appears perfectly at rest, and is mistaken for an egg or knit (its prior state not having been noticed) and the injury sustained is supposed to be by its pressure upon the stem of the plant, when in fact, it is a worm actually feeding on its juices: as soon as it changes to the flaxseed colour, by rolling it lightly with the finger, the tegument can be taken off, the worm will then appear with a greenish stripe through it, which is evidently the substance extracted from the plant: neither the egg nor young caterpillar, during its movement, can be distinctly seen without a glass; which every farmer ought to have, as it would enable him at all times to know the state of this and other insects. I think it probable, that another deposit of eggs will take place early in the spring, and perhaps a third between that and fall; but this conjecture remains for future investigation.

It appears to me that this insect can be utterly exterminated, by deferring to sow all grains affected by it until the fall deposit takes place; in which case the eggs will be laid on the young plants in the stubble field; then immediately afterwards commence pasturing or burning, which will destroy a large proportion, and any time during the larvæ state, (about the first of November the last season would have been a good time, but even now would answer) plough up the stubble fields well, which will finish the remainder, except such as are among the plants about stack yards, which must also be attended to. I have satisfactorily proven the efficacy of this plan, by ploughing a field where myriads were lodged; but it will probably fail of success, by not being generally gone into at the proper season, and it will be in vain for a few individuals to make the attempt. Let us then endeavour to ascertain that time of sowing which will be attended with most advantages; the first week in October, I have often heard mentioned by experienced farmers, as the most safe; but there have been instances of its being too early on account of the fly, and at other seasons too late on account of the winter. We may now, however, guard against the fall deposit, by observing the state of the insect, and sowing accordingly; and should the wheat be sufficiently rooted before winter sets in, I presume the Spring deposit need not be dreaded, where the ground is well manured, and the season favourable: for although it will certainly destroy the branch upon which it is lodged, yet, the root being strong, it will throw up other branches sufficient to insure a good crop: nevertheless, we may be disappointed in our calculations, by an early or severe winter, and thereby sustain more damage than we should have done by the fly if sown earlier; besides, should the wheat not be well rooted when the Spring deposit is made, it undoubtedly will be seriously injured. Under all these circumstances, I am clearly of opinion, that it would be best to sow the grain as early as possible, not later than the first of September, and immediately on the fly completing its deposit of eggs (which can easily be known by proper attention) turn in sheep or cattle, sufficient to pasture it close in the course of a week or ten days; if the deposit should not be made before October, (as was the case last season) the grain will not be injured by pasturing: the cattle, or whatever may be turned in, will be benefited; and the roots of the plants will then have attained strength to resist the attack of the fly in case pasturing should prove ineffectual. I can now show roots in the stubble field, that have completely resisted the attack, even where a great number of the larvæ are lodged. If it should so happen that it will be imprudent to pasture, and the ground is not too rough or stony, I would suggest the propriety of rolling, commencing as soon as the eggs are hatched, as the caterpillar is then in a tender state, and while on the leaf or upper part of the stalk, might be easily crushed. As a further precaution, I would think it advisable not to sow near a stubble field; but where it cannot be avoided, perhaps sowing rye on that side might have some tendency to preserve the wheat. I conceive it an error to say that any kind of wheat is of that vigor-

ous growth, that the stem will resist the fly; if the fly attacks it at all, it is the root that must be depended on, and it is idle to suppose that sowing oats with wheat (as recommended by some writers) can have any good effect. This is fully proven by the practice of sowing wheat on oats stubble; the usual complaint is "too much oats," without in the least degree preserving the wheat; besides I have during the last season carefully examined the oats, and did not discover a single instance of deposit amongst it. The fly is remarkably sagacious in depositing its progeny, its eggs being exactly fitted to the gutter of the leaf of the plant, where it is securely lodged. I therefore infer that, if there is a kind of wheat which the insect avoids, it must be on account of its leaf being smooth and not offering a place of safety. I do not know that there is any such kind, but I think it deserves examination. I shall consider it my duty to endeavour to trace the insect and its effects throughout the whole year, and should any thing further appear worth communicating, you may expect to hear from me.

Yours very respectfully,

JAMES WORTH.

ROBERTS VAUX, Esq. *Secretary of the Philadelphia Society for promoting Agriculture.*

FROM THE COLUMBIAN.

Ohio Turnpike & Canals.

The progress of the New York Canals, and probability of the speedy completion of the principal one between lake Erie and the Hudson, has drawn the attention of the intelligent and enterprising citizens of Kentucky and Ohio, to a consideration of the effects which might be produced thereby, on their trade with the seaboard. In October last there appeared in a Kentucky paper and subsequently in several of the papers of Ohio, and other parts of the Union, a publication evidently the result of a deep and intimate knowledge of the trade and interest of the western states, wherein the importance of a Canal, for connecting the waters of the Ohio river with Lake Erie, was urged with no ordinary ability, and accompanied by calculations of the time and expense of transporting produce to New York. It was stated, that the hot and humid climate of the lower Mississippi had been no less fatal to the persons engaged in the river trade, than injurious to the produce (flour, tobacco, provisions, &c.) which comprised the articles of barter. The fluctuations of the market—want of capital and shipping at New Orleans, and the hazards of the river during low water, were taken into the account; and the conclusion irresistibly drawn that the trade of a large portion of that western country would inevitably be drawn to New York.

There appeared no doubt on this subject, and accordingly the legislature of Ohio, at their last session, enacted a law providing for a survey of the route of the contemplated Canal, in case a certain tract of land, through which it must pass, could be obtained of the United States. That object has not been obtained, and the preparatory surveys have in some measure been suspended,

ed, but with every prospect of being taken up with renewed energy at a future day.

For the following view of this subject, so highly important to this city, as well as the western states, we are in a great measure indebted to *W. Steel, Esq.* of Ohio, a gentleman, who it is presumed has had ample opportunities of forming correct opinions and obtaining accurate statements on the subject. It appears that the fall from the summit level, between the waters of the Scioto and the Sandusky, is 300 feet; and it has been ascertained by the civil engineers, employed by the state of Virginia, that the Ohio river, at the mouth of the Great Kenhawa, is 83 feet below the level of Lake Erie. The amount of fall in the Ohio from the mouth of the Great Kenhawa, to the probable point where the Canal would connect with the Ohio, is estimated at about 340 feet, which would make the whole amount of lockage on the Ohio and Erie canal, about 720 feet. The country through which the canal will pass, is represented as favourable to excavation---there being apparently no rock to obstruct, and many circumstances highly propitious to the undertaking.

The produce which must pass through this line of canals, would be immense. The quantity of tobacco raised in Kentucky, in 1818, was about 25,000 hogshead, and about 100,000 barrels of flour are exported annually, and also large quantities of pork, beef, hemp, &c. Were the canals completed, it is calculated that one half the produce of Kentucky would come to the New York market. Ohio ships annually about 200,000 barrels of flour, and large quantities of beef, pork, whiskey, &c. &c. nearly all of which would come to New York.

The freight on a barrel of flour from Cincinnati to New Orleans, is \$1 50. In steam-boats it is carried down in 8 or 10 days, and in flat boats from 20 to 30 days. The Ohio Canal will be 200 miles in length, and travelling with produce may be at the rate of 50 miles per day. Produce may thus be transported from the Ohio river to the city of New York, in 14 days, viz. four to Lake Erie, two to Buffalo, seven to Albany, and one to New York. Packets for the conveyance of passengers only, can perform that distance in much less time.

The cost of transportation on the canal, is estimated at the rate of one cent per ton per mile, which would be, on each barrel of flour, from the Ohio river—

To Lake Erie,	- - -	20 cents.
To Buffalo,	- - -	20
Buffalo to Albany,	- - -	35
Albany to New York,	- - -	15

Total cost of transportation, 90 cents.
Rate of toll not ascertained, but supposed to be about - - 30 cents.

Total cost, per barrel, 120

Making the whole cost of transporting a barrel of flour from the Ohio river to this city, \$1 20 which is 30 cents less than the transportation to New Orleans.

The western traders universally prefer the New York to the New Orleans market, for the foregoing and other reasons, which might be given; and when we take into view the vast

and increasing population of the west—the current of emigration—the hardy enterprise of the people—the facilities for canal navigation, and the light shed on such works by the example of the state of New York, we cannot doubt that a few years will bring about the accomplishment of the *Ohio Canal*—a work of high and lasting interest, not merely to the contiguous states, but to the whole federal union.

TO THE EDITOR OF THE AMERICAN FARMER.

Harford County, July 25th, 1820.

FRIEND SKINNER,

In the seventeenth number of the second volume of thy valuable publication, is a second epistle from friend Jeremiah Simple, (caused by a monstrous typographical error in printing his first) wherein he takes occasion to observe, in his factitious manner, "that every stalk of corn grows alike in regard to the compass—throwing its leaves east and west, and having one flat side of the stalk on the south—and the other on the north"—and expresses great astonishment, upon finding that his aunt Simplicity had "lived so long in the country" without knowing that. On coming to the part of friend Jeremiah's letter where he makes the above observation, in the form of a question, put to his *aunt*, I involuntarily exclaimed, answering for her: "Well, indeed now, I have lived so long in the country, without knowing it; and (though it would afford me pleasure to find the fact so,) without having acquired credulity enough to enable me to believe it 'upon trust'": whereupon I immediately ran to a corn patch, of about three hundred hills, (thou wilt perhaps hear more of it, if it be worthy of further notice) standing about fifty yards from the house, where I found testimony that confirmed *not*, in my opinion, friend Simple's *attitude*; for there were as many, at least witnesses testifying against as for it, by their *attitude*; some stood stretching their leaves north and south—some east and west: indeed I saw different stalks extending their blades, in different directions towards all points of the compass, from the *opposite narrow sides* of the stalks. Not being able to establish friend Jeremiah's position there, and wishing to find him at least generally right, (for I had contracted a partiality for him,) on account of what he told us in his first letter about his garden and feathered gardeners, *corn-planting*, raising pumpkins, &c. I hastened to a corn-field, distant about three hundred yards from the house, to see if I could find more favourably *disposed* witnesses there: but they appeared to have conspired, with those in the patch, to prove that corn grows, with its narrow sides, from which the blades grow east and west, or otherwise, according to the *attitude* of the germ, or as it is familiarly called, heart of the grain in the ground: I therefore, despaired of finding testimony to support firmly, friend Simple's *assumed attitude*.

Friend Jeremiah has also taken the *attitude* that even Dark Mud, if turned around "every day for six weeks" "will periah." Now friend Skinner, I will relate a fact. In the beginning of last winter, my wife had a number of lavender plants in a small box, about fourteen inches

square, all which, except two, died in consequence of having been roughly treated in moving late in the winter, she planted early York cabbage seed in the said box, which produced upwards of seventy plants for setting out; although, together with the lavender, which is still alive and flourishing in the box, they were turned daily in the window where they stood, during the time that they remained in the house, in order to prevent them from having crooked stalks; which because of the propensity of vegetables to lean towards the light, would have been the inevitable result of their remaining constantly in the same *attitude*.

For the purpose friend Skinner of calling the attention of thy readers to what I am disposed to consider instances of the antipathies of plants, or, of the deleterious effect produced upon some, by the vicinity of others and thus preventing them from labouring in vain, I would observe that in the summer of 1819, a cabbage came up in a hill in my water melon patch, a short time after the young melon vine made its appearance, the vine, I hope that I may not be laughed at for *bull-making* never ran—it dwindled and died. This spring I made a very nice rich hill, in the middle of a bed intended for cabbages, and planted therein two seeds that you gave me, of a remarkably large squash; one of which came up and grew flourishingly, until the cabbages began to grow, when, though it was not shaded by them, it ceased to run, assumed a yellow hue, and is now irrecoverably gone, in despite of all I could do to save it. During the present season, also, two young and thriving water melon plants were moved from the situation that they occupied before, and placed (with a spade full of earth taken up with them so as not to impede their growth) between some cabbages, in such manner as not to be shaded by them—I believe that they will be more apt to die than bear, unless the cabbages be taken away from them.

I, friend Skinner, am in my noviciate, as well as friend Simple, though I am so prolix as to endanger thy patience; and have vanity enough to wish to see my bantling dressed up and sent abroad in thy vehicle; though I feel somewhat apprehensive lest it should make rather a gawky appearance. If this should be adjudged worthy of a place, it may encourage me to send thee another at some future day; but until I shall become better satisfied with them, it will be necessary that thou shouldst take them without the name of their

PARENT.

[We believe the secret to lie in this—that the blades of the corn, like the branches of trees, will run out into the widest space, in search of light and food. If the corn be planted in drills east and west, the blades will run north and south, and if drilled north and south, the blades will spread east and west—so with trees, let two saplings grow up near to each other from the same stump, or root, it will be found that on the side of each, next to and near the other, no branches will put out—after they have attained a considerable growth, cut one down, and you will find the other resembles a tree split down in the middle, with one half taken away—having no limbs on that side but as soon as you take away its neighbour, and give it pasture to feed and grow in, limbs will put out from the naked side. Branches of a tree will not grow up against a dark brick wall—but they will against the back of a light open summer house.]

Edit. Amer. Far.

FOR THE AMERICAN FARMER.

THE CONTINUED USE OF PLASTER OF PARIS

SAID TO EXHAUST LAND, IS IT SO?

MR. SKINNER,

In many parts of this state there are gentlemen, who once were among the warmest advocates of the fertilizing effects of plaster, now denouncing it as impoverishing their land.—In all such instances of complaint, where I have had an opportunity of witnessing the management of the complainant, I have thought but little observation was necessary, to detect the fallacy of the idea of the pernicious effects of plaster, and that as little examination was necessary to ascertain the true cause of sterility, in such cases. In all cases to which my observation has extended, (and it has not been very confined,) I have invariably found close grazing adopted, and the proprietors of those estates, not satisfied with the mowing of horned cattle, and the close paring of horses, have generally called in these efficient auxiliaries to paring, sheep, by which all vegetation that has ventured above the surface is removed, thereby exposing a bare surface to a summer's scorching sun, which prevents succeeding vegetation, and if a decomposition of what is below the surface should ensue, the vapour arising therefrom is dissipated in the air by the volatilizing effects of heat, and the excrements of the stock share the same fate.—Can those who have observed the effects of summer's fallow, be at a loss to account for sterility in land thus managed?—The mode of operation of plaster of Paris, is involved in much obscurity; be it by producing a combination of substances before inert as vegetable food, or by stimulating plants to seek with more avidity for nourishment, I believe it is universally admitted, that some impoverishment of ground succeeds the growth of all crops, which are entirely removed from the soil in which they grew, and if so, is it not evident that land treated as above must be impoverished, and that in proportion to the fertilizing effects of plaster?—The theory that plaster of itself affords the pabulum of vegetation very illly accords with the fact, that from 1½ to 2 tons of vegetation is afforded from a space of ground, from the use of one bushel of plaster, which, without this aid would not have yielded as many hundred pounds—although this theory has the sanction of a great name, I still think it erroneous. If any vegetation has escaped the destructive effects of the solar rays, and lingered out its existence till winter, its destruction is then inevitable.—If it be tap rooted, it is thrown on the surface, where it is withered to nothing by the blasting winds of this season—and how fares a bare surface during winter? The senses of any intelligent agriculturist says that an uncovered surface during the winter as well as summer is impoverished, while one that is covered, if it do not acquire fertility, retains what it had.—I may be asked, will not the vegetation left on the surface, by light grazing share the fate of the roots alluded to? I admit a *part* will, but the advantage of having the surface covered is paramount to the consideration of loss of manure in this way, and the most con-

clusive argument that I can adduce to establish the correctness of the position I have taken, is the result of the practice in Frederick County, Maryland, where they graze lightly, or not at all.

A SUBSCRIBER.

FOR THE AMERICAN FARMER.

Injudicious use of the Plough.

MR. SKINNER,—

If you can obtain a sight of Mr. Gregg's Pamphlet,* referred to by me in a letter some time ago, and would have the goodness to publish his most admirable system of management upon the wet low grounds which he farms in England, its publication would be extremely valuable; particularly to those who cultivate, like me, soil of a similar description. A plate of the *Crab Harrow* used in Pennsylvania, with coulter tines 9 or 10 inches long, drawn by two horses, one on each side of the row of Indian corn, and contrived with benches elevated so that the corn (which may be from 18 inches to 2 feet high) is passed over without injury, is very much wanted. I am persuaded that the old system adopted in the *cultivation alone* of Indian corn, has contributed no small share of its power to the exhaustion of the soil's fertility. I allude to the *abominable practice* of ploughing our corn fields so frequently during the progress of the corn's vegetation, and in this manner preventing that sod which was originally turned down by the plough from being decomposed, and of course from furnishing by that decomposition, its alimentary supply to the growing vegetable. It seems now to be an established doctrine among the scientific agriculturists of England, as well as our own country, with some few exceptions, that land should be ploughed as deep as possible, and that the sod once turned down by the plough should never be exposed again to the evaporating influence of the sun's rays, but suffered to pass through its different stages of decomposition with as little molestation as possible. Our corn fields, then, in place of being cultivated, *as the custom even now prevails*, so frequently with the plough, after being deeply fallowed, should be cultivated entirely with the tooth and coulter harrows used in Pennsylvania, and with Col. Taylor's Skimmer. By this mode of cultivation we shall, I believe, contribute a greater share of renovation to the soil's fertility, than even the anti-grazing system so loudly eulogised would supply. I may probably at some future period offer a few reflections upon this system of excluding the hoof and the tooth from our arable fields, and must frankly acknowledge my scepticism as to the great advantages resulting from its universal adoption. Indeed I am rather inclined to think that the advantages will be as a feather, when put in the scale of the actual losses sustained by the practice. Nor can I account in a manner satisfactory to myself, why land, which has been *defastured upon by cattle for a series of years*, should, when at last broken and reduced to cultivation by the plough, be capable of producing such luxuriant crops, if poaching and grazing be attended with such widespread mischief, as the advocates for the anti-

grazing plan so warmly contend. *Rest to land*, and judicious cultivation afterwards when that land is roused from its state of quietude, will operate more beneficial effects, than we shall ever experience from the enclosing system. By rest, no doubt, a chemical change is effected in the soil, most favourable to vegetation.

I am, dear sir,

Very respectfully, yours, &c.

Gloucester County, (Va.) July 21st, 1820.

FOR THE AMERICAN FARMER.

DOUBLE SHOVEL PLOUGH.

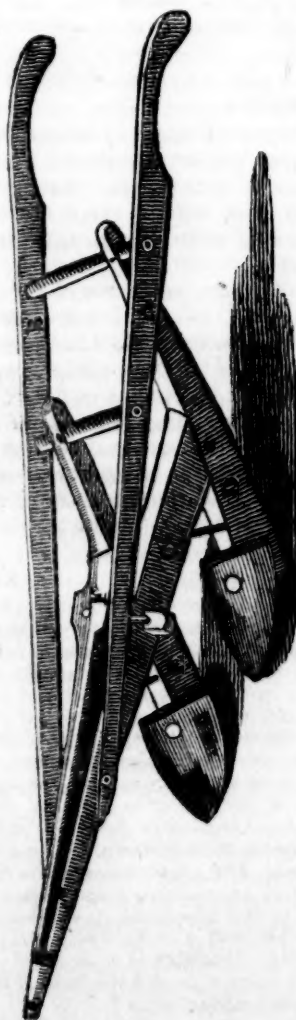
Oak Land, June 17th, 1820.

DEAR SIR,

Having observed in your valuable paper an inquiry for the Double Shovel Plough, and having received one from my friend in Loudon county, I embrace an opportunity by my brother, Doctor Mason, to show you the model. I wished to have you one made, but time will not permit, as he is now on the eve of starting, and the model sent I wish to be returned by the vessel; however I hope you will have time sufficient to have one made. You will find at once the great utility and advantage of the improvement made on the old shovel plough, and I must acknowledge for the cultivation of corn and tobacco, it surpasses any instrument I have seen. You will observe the dimensions on the plough of every part.

In great haste, yours, &c.

RICHARD B. MASON.



Ft.	In.	Ft.	In.	Ft.	In.
A	5 0	C	5 0	E	2 10
B	5 64	D	5 3	F	2 3

FROM A VIRGINIA PAPER

THE TARIFF QUESTION.

In the list of the revolutionary worthies of Virginia, few names are more conspicuous and imposing than that of EDMUND PENDLETON.—Mr. Wirt covers it in his life of Patrick Henry, with a profusion of his most brilliant superlatives. He represents Mr. Pendleton as one who, whether in the capacity of a lawyer or statesman, had "few equals, no superiors."—A friend has put into our hands an autograph letter of this eminent person, written eighteen years ago, on a subject which is now under the most earnest discussion throughout the United States. We publish the letter as the expression of his opinions, but do not wish to be understood as thereby giving them our assent.—The experience of the United States since its date has, we think, stamped the character of mere delusion upon the plan of "leaving the respect to our flag to rest upon the fair dealing and good behaviour of our citizens in foreign countries, and on their carrying valuable commodities to market." And it is pretty well ascertained that "all the world" is not disposed "to scramble for the trade of purchasing our produce and furnishing supplies of necessaries."

Virginia, December 4, 1792.

SIR,—By my friend, Colonel Taylor, whom I mentioned to you at Richmond, I have to thank you for the two pamphlets presented me; which I have read with attention and pleasure, perhaps for the most powerful of all reasons, that the sentiments in general coincide with my own.

A moderate impost on imports and tonnage on vessels, may properly be made part of every fiscal system, and five per cent. seemed to have been fixed on as a standard of moderation by the general consent of America, but the object should be merely revenue, unmixed with other purposes; so that if sumptuary laws or other projects are to be tried, let it be by other detached laws to stand or fall by themselves: and let not the impost be expected to answer all governmental purposes however extensive; for that would be ruinous to trade and of course to the citizens, and they would yet be insensible of it, not knowing they paid the tax, although they did so, with large increase. No, let them at least feel this increased burden, and they will then inquire of their representatives why it is laid, and how the money is disposed of, as they ought to do.—Laws which interfere in the private employment of citizens, and encourage one kind at the expense of others, by premiums, bounties, or prohibitions, are as impolitic as unjust; they violate private rights not ceded to society, and fetter occupations as well as barter of the produce of labour, both of which succeed best, when left free to the will and contracts of those concerned. It is a fallacious argument indeed, that the agricultural interest is benefited by opening one new market for their produce and supplies, when the acquisition is made by means tending to exclude all competition, and give monopoly in both to the new agent—and such is the effect of these laws, the weight of which fall upon tillage; whereas when manufacturers are left to grow out of the

* We will thank any gentleman for the loan of it.

natural order of things, they come to the agricultural market as new competitors, upon equal or better terms; and until they can afford to do so without the aid of premiums, it is better for them and the community too, that they should remain in tilling the earth. I cannot conceive any reasoning, however specious, which is less solid, than a kind I have frequently met with, "that the whole price paid for imported articles, which might be made here is lost to the community," which is fully refuted by a familiar case put to prove it: *A.* is a farmer; who has produce to barter for necessities; a foreigner offers to allow him 10*l.* for his produce, and to furnish the articles he wants at 8*l.* *B.* is a neighbouring manufacturer, who wants and will allow *A.* for the produce the 10*l.* but must have 10*l.* for the necessities in exchange, either for want of skill or industry in his business, for want of proper hands or instruments to carry it on—or most probably from the superior value of labour employed in husbandry to that of the other. If *A.* barter with *B.* how is the 8*l.* saved to the community? Is it not obvious that trade with the foreigner would have entitled *A.* to a balance of 40*s.* in cash, clear gain to him and to the community too, (who are as a body only interested in the balances paid or received in cash in foreign trade.) Now if the legislature add a tax upon the necessities of 40*s.* to prevent the foreigner from underselling *B.* they not only improperly intermeddle with the private dealings of *A.* and *B.* but in plain English tax *A.* 40*s.* a year to save *B.* from loss, for he gains nothing, having laid out the sum in increased expenses. Is this just, or consistent with the equal rights of both? or for the interest of society? by no means; let both alone, and *B.* will either improve his system so as to save his 40*s.* without loss to *A.* or take up *A.*'s occupation and gain 40*s.* and add that sum also to the gain of the community.

The spirit of the British navigation acts, though applauded there, and by most governments in the world, is founded on a narrow, selfish policy, unfriendly to the general interests of mankind, and therefore, when adopted, must be supported by a powerful navy at a ruinous expense. I believe upon a fair calculation it has that way cost Britain 100*l.* at least for every penny benefit she has derived from this favoured policy; although her insular situation and remote colonies made a considerable navy necessary for her security. America is not in that situation; and I hope never to see a navy attempted, beyond what is adequate to secure our coast from pirates and marauders, and keep the peace between our own as well as foreign trading vessels in our ports and on the coasts; leaving the respect to our flag to rest upon the fair dealing and good behaviour of our citizens in foreign countries, and on their carrying valuable commodities to market, as is now the case.

This will admit of a noble, liberal and beneficial policy, to open our ports to all the world, without discrimination, or retaliating regulations; let all scramble for the trade of purchasing our produce and furnishing supplies of necessities, whilst our citizens are engaged in agriculture, the most profitable, as well as the most independent and honourable employment of man. at the same time let all employments be free and open to such as choose them, whether mer-

chant, carrier, seaman, or tradesman, without clog or restraint. I beg pardon for having troubled you with my crude thoughts upon subjects you appear so much better acquainted with; and am with much respect, sir,

Your most obedient servant,
EDMUND PENDLETON.

FOR THE AMERICAN FARMER.

INQUIRIES CONCERNING.

ORCHARD GRASS—(DEFERRED BY ACCIDENT.)

Fredericksburgh, (Virg.) July 20th, 1820.

MR. SKINNER—The principal object of your very useful paper, being the diffusion of agricultural information through our country; I shall feel myself much obliged if some one of our farming brethren, who is acquainted with the valuable union of orchard grass and clover, as constituting in my judgment the best hay next to timothy, will answer the following queries in the "American Farmer."

1st. What quantity of orchard grass and clover seed should be sown to the acre?

2nd. What season is the best for sowing, autumn or spring?

3rd. Should they be sown alone, or with wheat in autumn, or with oats in spring?

4th In what market can the orchard grass seed be procured, and at what price per bushel?

A FARMER.

FOR THE AMERICAN FARMER.

July 31st, 1820.

MR. SKINNER,

The economy of wood is becoming a deeply interesting subject to the farmer. The immense consumption in most negro quarters, employs much of the time of both hands and teams, that ought to be applied to taking out manure. You could scarcely do any thing more acceptable to many farmers, than to induce stove vendors to advertise in your useful paper a description with the prices of those that would best suit the above purposes. The size that would be most generally useful, would be one to cook for twenty or twenty five persons big and little. And the points most requisite, are to combine the greatest saving of fuel with the greatest capacity for boiling water or other liquids, and the power of using the fire by night, so as to give light to the stove room.

Your obd't serv't.

RUSTICUS.

[Fully concurring in the views of the writer of the above we will make known gratuitously any propositions or advertisement on the subject.]

Ed. Am. Far.

TO THE EDITOR OF THE AMERICAN FARMER.

SIR,—You will render a favour if you will publish a good receipt for making beer; one that a plain farmer can understand. The proportions, for one barrel, of barley, hops, and water. We surely ought to make as good "October" as any "He" in John Bull's dominions. Your attention will particularly oblige,

NO GROG MAN.

5th August, 1820.

THE FARMER.

BALTIMORE, FRIDAY, SEPTEMBER, 1, 1820.

Present Prices of Country Produce in this Market.

Actual sales of WHEAT—WHITE, 85 to 90 cts.—RED, 80 to 85 cts.—CORN, 40 to 41 cts.—RYE, 40 to 42 cts.—OATS, 20 to 25 cts.—HAY, per ton \$14 to \$15—STRAW \$9 to \$11—HERRINGS, No. 1, \$2 75 to \$3—Do. No. 2, \$2 12½ to \$2 50—SHAD, No. 1, \$6 to \$6 50—Do. No. 2 \$5 to \$5 50—PORK, prime, per cwt. \$14 to \$14 50—BEEF from \$11 to \$12 50—FLOUR from the wagons, \$4 50—WHISKEY, from do. 35 to 36 cts.—BUTTER, per lb. 20 to 25 cts.—EGGS, per doz. 12 to 15 cts.—VEAL, per lb. 6 to 8 cts.—LAMB, per quarter 37½ to 50 cts.—BEEF, prime pieces 8 to 10 cts.—HAMS, 14 cts.—MIDDLINGS 10 cts.—LIVE CATTLE, \$6—CHICKENS, per doz. \$2 to \$2 50—POTATOES, 37½ to 50 cts.—TAR, \$2 25—SCARCE—TURPENTINE soft \$2 to \$2 25—SPIRITS do. 35 cts.—PITCH, \$2 25—BACON, hog round, 7 to 8 cts.—LARD, 11 to 12 cts.—PORK, prime 12 to 14 cts.—BLACK EYE PEAS, 65 to 70 cts.—SHINGLES, best Deep Creek, \$8 50—Do. small \$4 75 to \$5—FLOORING PLANK, 5-4 \$26—LONDON WHITE LEAD \$4 25—American do. \$3 75—BOILED OIL, \$1 37½—FEATHERS, 50 to 62½ cts.—COTTON Upland, 20 to 21 cts.—Maryland TOBACCO, actual sales the last week 5 hhds. from Poplar Springs, Anne Arundel county, 2 crop, at \$17.—1 do. do. at \$14, 2 do. seconds at \$8—5 hhds. from Friendship, Anne Arundel 2 crop, at \$10—2 seconds at \$8—1 do. do. at \$9—4 hhds. from Montgomery, 2 do. fired at \$10—2 do. at \$13—4 hhds. from do. fired, 2 at \$11 and \$12, 2 at \$16 25—4 hhds. from do. unfired, at \$8 25—No sales of Virginia Tobacco, that we know of.

Calvert Land for Sale.

I will sell for the proprietors, at private sale, a tract of land, lying in Calvert County, on the Patuxent river, containing from 800 to 1000 acres, bounded on the south and east by battle creek, and on the west by the Patuxent, forming a peninsula.

The land is well known in the neighbouring counties, and can hardly need description, more especially as persons inclined to buy will look at it. The present crops of corn and tobacco will best speak its character, and persons desirous of purchasing will do well to call at the place and view them. The tenants to whom 'tis rented, and judges of such crops say there will be a product of 1000 barrels of corn, and more than 60 hogsheads of tobacco.

This body of land will make two good farms, and will be sold either separately or together, but the latter mode would be preferred.

It lies well, is as little broken as any body of the same quantity perhaps any where to be found.

The river is well known at home and abroad for its easy and bold channel and the Creek equally deserves this character. The navigation is almost to the very door, and the bay craft lie in the creek within ten yards of the shore.

This place is from 20 to 25 miles from the mouth of the Patuxent, and receives from this river and the creek an abundant supply of the best fish, crabs and oysters, and is visited by almost every kind of wild fowl.

Terms of payment will be made easy. Letters, post paid, addressed to Dr. Oct's. C. Taney, at Lower Marlborough, Calvert county, or to me at Georgetown, District Columbia, will be attended to.

AUGUSTUS TANEY.

Georgetown, August 26.

BALTIMORE,

PUBLISHED EVERY FRIDAY,

BY JOHN S. SKINNER, EDITOR.